THE INVENTION CLAIMED IS:

1. An illumination system comprising:

viewing illumination at a surrogate's location; and

recreating the illumination at a user's location as a relative perceived illumination.

2. The system as claimed in claim 1 wherein:

viewing the illumination determines absolute luminance values; and

recreating the illumination provides a relative perceived luminance.

3. The system as claimed in claim 1 wherein:

recreating the illumination includes calculating the relative perceived illumination by at least one of scaling linearly from a midpoint illumination, scaling linearly from the brightest illumination, scaling non-linearly from a midpoint illumination, scaling with varying base illumination, and a combination thereof.

4. The system as claimed in claim 1 additionally comprising:

viewing the illumination uses a camera and a light sensor directed outward from the surrogate; and

recreating the illumination uses a projector directed inward towards a projection screen at the user's location.

5. The system as claimed in claim 1 wherein:

viewing the illumination uses cameras and light sensors directed outward from the surrogate;

recreating the illumination uses projectors directed inward towards projection screens around the user; and

additionally comprising:

viewing the user from cameras directed inward towards the user to provide an image of the user; and

displaying the image of the user on the surrogate having illumination appropriate for the surrogate's location.

6. An illumination method comprising:

viewing illumination at a surrogate's location in directions outward from the surrogate;

determining the absolute luminance values of the illumination;

transmitting the absolute luminance values to a user's location;

calculating relative perceived luminance values;

recreating the illumination at the user's location in directions inward towards the user using a relative perceived illumination determined from the calculated relative perceived luminance values.

7. The method as claimed in claim 6 wherein:

recreating the illumination includes ramping the luminance between the directions inward towards the user to make the ramping and a derivative of the ramping continuous.

8. The method as claimed in claim 6 wherein:

calculating relative perceived luminance values includes calculating by at least one of scaling linearly from a midpoint illumination, scaling linearly from the brightest illumination, scaling non-linearly from a midpoint illumination, scaling with varying base illumination, and a combination thereof.

9. The method as claimed in claim 6 additionally comprising:

viewing the illumination uses cameras and two light sensors for each of the cameras, the cameras and light sensors directed outward from the surrogate; and

recreating the illumination uses projectors directed inward towards projection screens at the user's location around the user, the projectors changing illumination by at least one of varying projector power, using an electrochromic glass, a combination of fixed and rotating polarizing filters, and a combination thereof.

10. The method as claimed in claim 6 wherein:

viewing the illumination uses cameras and two light sensors for each of the cameras, the cameras and light sensors directed outward from the surrogate; and

recreating the illumination uses projectors directed inward towards projection screens at the user's location around the user; and

additionally comprising:

viewing the user from cameras directed inward towards the user to provide images of the user; and

displaying the images of the user on the surrogate having illumination appropriate for the surrogate's location.

11. An illumination system comprising:

video equipment for viewing illumination at a surrogate's location; and

video equipment for recreating the illumination at a user's location as a relative perceived illumination.

12. The system as claimed in claim 11 wherein:

the video equipment for viewing the illumination determines absolute luminance values; and

the video equipment for recreating the illumination provides a relative perceived luminance.

13. The system as claimed in claim 11 wherein:

video equipment for recreating the illumination includes calculating the relative perceived illumination by at least one of scaling linearly from a midpoint illumination, scaling linearly from the brightest illumination, scaling non-linearly from a midpoint illumination, scaling with varying base illumination, and a combination thereof.

14. The system as claimed in claim 11 additionally comprising:

video equipment for viewing the illumination uses a camera and a light sensor directed outward from the surrogate; and

video equipment for recreating the illumination uses a projector directed inward towards a projection screen at the user's location.

15. The system as claimed in claim 11 wherein:

video equipment for viewing the illumination uses cameras and light sensors directed outward from the surrogate;

video equipment for recreating the illumination uses projectors directed inward towards projection screens around the user; and

additionally comprising:

video equipment for viewing the user from cameras directed inward towards the user to provide an image of the user; and

video equipment for displaying the image of the user on the surrogate having illumination appropriate for the surrogate's location.

16. A system of illumination comprising:

cameras for viewing illumination at a surrogate's location in directions outward from the surrogate;

light sensors for determining the absolute luminance values of the illumination;

a transmitter for transmitting the absolute luminance values to a user's location;

a computer for calculating relative perceived luminance values;

projectors for recreating the illumination at the user's location in directions inward towards the user using a relative perceived illumination determined from the calculated relative perceived luminance values.

17. The system as claimed in claim 16 wherein:

the projectors for recreating the illumination includes video equipment for ramping the luminance between the directions inward towards the user to make the ramping and a derivative of the ramping continuous.

18. The system as claimed in claim 16 wherein:

the computer calculates relative perceived luminance values by at least one of scaling linearly from a midpoint illumination, scaling linearly from the brightest illumination, scaling non-linearly from a midpoint illumination, scaling with varying base illumination, and a combination thereof.

19. The system as claimed in claim 16 wherein:

the cameras have two light sensors for each camera; and

the projectors include video equipment for changing illumination including a projector power changer, electrochromic glass, a combination of fixed and rotating polarizing filters, and a combination thereof.

20. The system as claimed in claim 16 wherein:

the cameras have two light sensors for each camera; and

the projectors include equipment for changing illumination; and

additionally comprising:

cameras directed inward towards the user to provide images of the user; and

the surrogate having displays for displaying the user with illumination appropriate for the surrogate's location.